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[illegible]

21 80. The method of claim 79, further comprising contacting said fluid with a first  
22 capillary region and a second capillary region adjacent to said first capillary region,  
23 wherein a difference in capillarity of said first capillary region compared to said  
24 second capillary region alters a rate or direction of said fluid flow within said device

25 in comparison to the rate or direction of said fluid flow within said device in the  
26 absence of said difference in capillarity.

27 ~~81~~. The method of claim 79, further comprising contacting said fluid with a  
28 reagent dried on a surface of the device, whereby said reagent dissolves into said  
29 fluid, thereby lowering the surface tension of said fluid.

30 ~~82~~. The method of claim 79, wherein said device comprises a plurality of capillary  
31 channels.

32 ~~83~~. The method of claim 79, wherein one or more of said hydrophobic regions are  
33 flanked by hydrophilic regions.

34 ~~84~~. The method of claim 79, wherein at least one of said hydrophobic regions alter  
35 the rate of flow within said device.

36 ~~85~~. The method of claim 84, wherein said hydrophobic region(s) that alter the rate  
37 of flow within said device retard fluid flow until rendered hydrophilic.

38 ~~86~~. A device that conducts fluid through one or more capillary channels,  
39 comprising:

40 a capillary channel comprising (i) a first capillary region comprising a hydrophilic  
41 surface and (ii) a second capillary region comprising a hydrophobic surface adjacent  
42 to said first capillary region.

43 ~~87~~. The device of claim 86, wherein said device further comprises a third capillary  
44 region comprising a hydrophilic surface adjacent to said second capillary region.

45 ~~88~~. The device of claim 86, wherein said hydrophobic surface alters a rate or  
46 direction of fluid flow within said device.

47 ~~89~~. The device of claim 86, further comprising a reagent dried on a surface of the  
48 device that, when dissolved into reagent dissolves into fluid within said device, lowers  
49 the surface tension of said fluid.

50 90. The device of claim 86, wherein said device comprises a plurality of capillary  
51 channels.

52 91. A method for regulating fluid flow in a device that conducts fluid through one  
53 or more capillary channels, comprising:

54 introducing fluid into a capillary channel comprising (i) a first capillary region  
55 comprising a surface having a first contact angle and (ii) a second capillary region  
56 adjacent to said first capillary region comprising a surface having a second contact  
57 angle less than that of said first contact angle, whereby fluid flows through said first  
58 capillary region to contact said second capillary region.

59 92. The method of claim 91, wherein said device further comprises a third  
60 capillary region adjacent to said second capillary region comprising a surface having a  
61 third contact angle greater than that of said second contact angle, wherein the rate of  
62 flow of said fluid into said third capillary region is regulated by the flow of fluid  
63 through said second capillary region.

64 93. The method of claim 92, wherein said second capillary region delays fluid  
65 flow into said third capillary region until said second contact angle is increased.